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(54) MANUFACTURE OF MULTILAYERED PRINTED WIRING BOARD

(57) Abstract:

PROBLEM TO BE SOLVED: To form a multilayered board having small-diameter holes by boring a non-through hole into a specific epoxy adhesive film coated with copper foil and integrally piling up an inner circuit board upon the thermosetting epoxy resin composition layer of the adhesive film and a release sheet and a mirror plate on the copper foil of the adhesive film, and then, connecting the copper foil to an inner-layer circuit by plating the inside of the non-through hole.

SOLUTION: A non-through hole 4 having a diameter of 0.15 mm is bored into an epoxy adhesive film 3 coated with copper foil 1 and containing a thermosetting epoxy resin composition layer 2 composed of a halogenated epoxy copolymer having a heavy molecular weight of ≥100,000 for roughening the surface of the foil 1, a crosslinking agent, and a polyfunctional epoxy resin. An inner- layer circuit board 5 is integrally piled upon the layer 2 of the film 3 and a release sheet 6 and a mirror surface are successively laminated upon the surface of the foil 1. After the epoxy resin composition 7 of the layer 2 oozing out in the hole 4 is removed and a through hole is opened and plated with copper, a multilayered printed wiring board having a nonthrough hole in its surface layer can be formed by forming outer-layer wiring. The diameter of the hole 4 is adjusted to 0.13 mm at the opening and 0.12 mm at the bottom.

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